Geoduck Aquaculture Feasibility Project

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Geoducks have been reported at depths reaching 360 feet, but are most often found from 10 to 80 feet below mean low tide mark.

Geoducks grow about 1 inch per year in shell length for the first 4-10 years.

Geoduck feed on phytoplankton (single-celled marine algae).

Geoduck spawn from late April to July. Females release 7-10 million eggs.

For more information about the Geoduck Aquaculture Pilot Project, contact Celia Barton or Jeanne Koenings

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Legislature Funds Geoduck Pilot Project

The 2003 Legislature directed the state Department of Natural Resources (DNR) to develop a **Pilot Project** proposal to determine the feasibility of geoduck aquaculture on tidelands and submerged lands DNR manages in Puget Sound as a public trust. DNR is working with the University of Washington School of Aquatic & Fishery Sciences to design and conduct this Pilot Project. The Washington Department of Fish and Wildlife, the 18 Puget Sound Treaty Indian Tribes, and DNR jointly manage this Pilot Project.

This is the third edition of an e-newsletter designed to keep everyone informed about the progress of the Pilot Project.

What We've Been Hearing

Our outreach efforts really heated up in the last half of January and all of February. DNR staff did presentations to WRIA 14 (watershed planning unit) in Shelton, the Island County Marine Resources Committee on Whidbey Island, and the Jefferson County Marine Resources Committee in Port Hadlock. What we heard in response was similar for all three groups: interest in the topic of geoduck aquaculture coupled with questions about the impact of doing such aquaculture on the rest of the aquatic community and impacts to public users of the beach. We also met with shoreline and natural resource planners in Snohomish and Jefferson counties to inform them of the project. They encouraged us to give presentations to their County Commissioners.

The Co-Conveners (DNR, Fish & Wildlife, and Puget Sound Treaty Tribes) held several meetings to discuss the economic questions around geoduck aquaculture, enforcement issues, and a jump-start in-the-ground component to the pilot project. The Co-Conveners also held a joint meeting with the Pacific Coast Shellfish Growers Association and the Geoduck Harvesters Association. That meeting resulted in a smaller group meeting to talk about cooperating in the jump-start project.

DNR staff also met with DNR regional staff, two meetings with Puget Sound Action Team staff, Department of Ecology shellfish staff, Department of Health shellfish staff, and a meeting with UW School of Marine Affairs economists.

To learn more about the private geoduck industry in Washington State, we set up a middle-of-the-night tour on private tidelands on Totten Inlet that are used for clam, oyster, and geoduck aquaculture. Winter low tides occur late at night so that's when the geoduck harvest happens. We also did a tour of a geoduck hatchery in Jefferson County where we learned about the science of taking broodstock, spawning them, and then raising the larvae to planting size.

At the end of February, DNR staff joined our counterparts in British Columbia where there is a significant wild geoduck fishery, as well as an emerging aquaculture fishery. We shared information about how the fishery is managed in both countries and what information gaps we each have.

On March 17th, we'll be meeting with the Snohomish County Marine Resources Committee in Everett. We are also beginning to schedule meetings with Boards of County Commissioners throughout Puget Sound.

Geoducks are jointly managed by the Washington Department of Natural Resources, and Department of Fish & Wildlife and 18 Puget Sound Treaty Indian Tribes.

Puget Sound Treaty Indian Tribes have a right to 50% of the harvestable surplus of geoducks.

The Department of Natural Resources has proprietary rights over the State's half of the harvest and auctions the right to harvest geoducks to private companies and individuals.

The Department of Fish & Wildlife ensures the biological health of the geoduck fishery.

All three groups provide enforcement.

Pilot Project

As explained in the last newsletter, contracts have been signed with The University of Washington School of Aquatic & Fishery Sciences (UW), the Pacific Shellfish Institute and Baywater, Inc. These three groups have completed their first product which is a comprehensive literature review and synopsis of issues relating to geoduck ecology and aquaculture production. It's a 158-page compendium of what is known about geoduck and is an excellent resource. It's available on our website at www.dnr.wa.gov/htdocs/aqr/shellfish/aqua/index.htm Future products from these contracts include a report on research findings related to subtidal geoduck aquaculture (due in April); assessment of the current state of knowledge relative to geoduck genetics and requirements for stock management (due in July); a report evaluating geoduck recruitment and population structure and assessing implications for geoduck enhancement (due in August); and a planning assessment for Phase II (due at the end of September).

We are also examining the possibility of a small jump-start to the in-the-ground part of this project. This project would leverage a small amount of funding from this Pilot Project with UW monies for a graduate student at UW to conduct real-world research in the field.

Aquaculture Impacts

While the UW School of Aquatic & Fishery Sciences studies the biological issues of geoduck aquaculture, the Department of Natural Resources, the Department of Fish and Wildlife, and the 18 Puget Sound Treaty Indian Tribes have been meeting regularly to work on the legal and management issues surrounding geoduck aquaculture. We have explored the economic questions related to geoduck aquaculture and have decided to hire an economist to study the issue and do the analysis. The analysis would include an assessment of the potential positive and/or negative economic impacts of geoduck aquaculture on DNR aquatic lands on wild harvest geoduck production and markets. The next issue the Co-Conveners are working on is enforcement—how can we have better "chain of custody" to ensure the legal harvest and health of Washington geoduck.

New Web Page

The new Web Page for the Geoduck Aquaculture Feasibility Pilot Project is now up and running. It is part of the DNR Aquatic Resources web site and can be found at www.dnr.wa.gov/htdocs/aqr/shellfish/aqua/index.htm The site contains a Fact Sheet about the Pilot Project; all issues of this Newsletter; a public opinion survey; links to all the partners in the Pilot Project; products from the UW contracts; and links to other agencies and organizations providing information about shellfish.

Feedback Needed

We are always looking for feedback about Geoduck Aquaculture and this Pilot Project. Please contact either of the two DNR project coordinators: Celia Barton, (360) 902-1025, e-mail: celia.barton@wadnr.wa.gov or Jeanne Koenings, (360) 902-1080, e-mail: jeanne.koenings@wadnr.wa.gov.